

## CLAIMS:

1. Receiver (1) for receiving at least one encoded block signal and comprising a processor system (2) for generating branch signals in dependence on said block signal, said branch signals defining branches of a trellis, (18) and generating node signals defining nodes of said trellis, (18) and generating cost signals defining cost per branch, and generating path signals defining paths in said trellis (18) for selecting candidates for said block signal, wherein said processor system (2) combines cost signals for series of branches and compares cumulated cost with thresholds for said selecting of candidates.
2. Receiver (1) according to claim 1, wherein said processor system (2) compares said cumulated cost with increasing thresholds per trellis (18), with cost signals being a function of branch signals and/or node signals.
3. Receiver (1) according to claim 1 or 2, wherein said processor system (2) combines at least some of said cost signals for series of branches by concatenating a first series of one or more branches and a second series of one or more branches which have at least one node in common.
4. Receiver (1) according to claim 1 or 2, wherein said processor system (2) generates said cost signals in a first trellis direction and combines cost signals in a second trellis direction, with said first trellis direction and said second trellis direction being different.
5. Receiver (1) according to claim 4, wherein said processor system (2) combines said cost signals for at least three series of one or more branches, with a first series of one or more branches being lexicographically smaller than a second series of one or more branches and with the second series of one or more branches being lexicographically smaller than a third series of one or more branches.

6. Receiver (1) according to claim 1 or 2, wherein said processor system (2) detects a check sum of said candidates, with a first sub-part being used for list reduction and with a second sub-part being used for error detection.

5 7. Receiver (1) according to claim 6, wherein said processor system (2) in case of zero candidates satisfying a list reduction criterion requests a data retransmission or orders an audio/video action and in case of one candidate satisfying a list reduction criterion selects this candidate and in case of two or more candidates satisfying a list reduction criterion selects the candidate with the lowest cost, with said processor system (2) testing the selected  
10 candidate via an error detection criterion.

8. Processor system (2) for use in a receiver (1) for receiving at least one encoded block signal and comprising said processor system (2) for, in dependence on said block signal, generating branch signals defining branches of a trellis (18) and generating node  
15 signals defining nodes of said trellis (18) and generating cost signals defining cost per branch and generating path signals defining paths in said trellis (18) for selecting candidates for said block signal, wherein said processor system (2) combines cost signals for series of branches and compares cumulated cost with thresholds for said selecting of candidates.

20 9. Method for use in a receiver (1) for receiving at least one encoded block signal and comprising the steps of, in dependence on said block signal, generating branch signals defining branches of a trellis (18) and generating node signals defining nodes of said trellis, (18) and generating cost signals defining cost per branch, and generating path signals defining paths in said trellis (18) for selecting candidates for said block signal, wherein said  
25 method comprises the steps of combining cost signals for series of branches and comparing cumulated cost with thresholds for said selecting of candidates.

10. Processor program product to be run on a processor system (2) for use in a receiver (1) for receiving at least one encoded block signal and comprising said processor  
30 system (2), which processor program product comprises the functions of, in dependence on said block signal, generating branch signals defining branches of a trellis, (18) and generating node signals defining nodes of said trellis, (18) and generating cost signals defining cost per branch and generating path signals defining paths in said trellis (18) for selecting candidates for said block signal, wherein said processor program product comprises the functions of

combining cost signals for series of branches and comparing cumulated cost with thresholds for said selecting of candidates.